

Die Alpenkreuzotter (*Vipera berus marasso*), eine neue Unterart in den Bayerischen Alpen

Josef F. Schmidtler¹ & Günter Hansbauer²

¹Liebensteinstr. 9A, D-81243 München, josef@schmidtler.eu;

²Bayerisches Landesamt für Umwelt, Bürgermeister-Ulrich-Str. 160, D-86179 Augsburg,
guenter.hansbauer@lfu.bayern.de

The Alpine common adder (*Vipera berus marasso*), a new subspecies in the Bavarian Alps

In the last years especially genetical investigations have changed the appearance of the herpetofauna at the foothills of the Bavarian Alps. Different species had crossed in postglacial times the central mountain ridge of the Alps appearing insurmountable hitherto. This is valid in particular for some subspecies of *Bufo viridis*, *Podarcis muralis*, *Natrix natrix*, *Natrix helvetica*, but also of *Vipera berus*. The existence of an independent Northern Italian and Eastern alpine form within *Vipera berus* was first published by Kalyabina et al. (2004) on the basis of mitochondrial investigations in Eastern alpine specimens, which comprised also a specimen from Berchtesgaden in Bavaria. This appearance was stabilised consecutively by several publications and led to several trivial names which finally moved Schmidtler (2019) to seek a subspecific name for the common adder being available nomenclaturally and systematically: *Coluber cherseseae* var. *marasso* Pollini, 1818; after the modern nomenclature, henceforth *Vipera berus marasso* (Pollini, 1818), with the type locality Legnago, province of Verona in the Padan Plain / Italy (Contorni di Legnago). *Vipera limnaea* Bendiscioli, 1826, also from the Padan plain, as well as *Pelias tyrolensis* Reuss, 1930 and *Pelias schreiberi*, Reuss, 1930, both from the surroundings of Salzburg in Austria, are younger and available synonyms of *V. b. marasso*, and both are bearing its characteristic discontinuous zigzags pattern, unlike the investigated Bavarian specimens. Wolfgang Völkl's field investigations induced the insight that this subspecies, initially identified mitochondrially, extended to the alpine fringes of southeasternmost Bavaria. To the west of the two *marasso* populations in Bavaria only populations of *V. b. berus* could be found. Aside the locality in Berchtesgaden not known exactly, now two populations of *V. b. marasso* near Inzell and Ruhpolding (both district of Traunstein) are known in the physical region of Schwäbisch-Oberbayerische Voralpen within the Chiemgauer Alpen. The investigation area of Inzell bargains for two peat bogs with adjacent grassland being more or less cultivated, lying in the so called Inzeller Becken in an altitude from 680 to 710 m. The investigation area of Ruhpolding comprises two alpine torrential streams in altitudes from 710 to about 800 m above sea level. In Hugemann (2016) there was documented by mitochondrial and nuclear analyses that *V. b. berus* und *V. b. marasso* meet at the southeastern margin of the Bavarian Alps and that there exists a recent gene flow.

Key words: *Vipera berus berus*, *Vipera berus marasso*, Alpine common adder, Germany, Bavaria, distribution, habitat.